

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.-18. (Cancelled)

19. (Previously Presented) A particle comprising:

(a) a protein envelope with a fusion protein, the fusion protein comprising a virus protein, a cell permeability-mediating peptide, and a heterologous cell-specific binding site; and

(b) nucleic acid sequences present within the protein envelope, each of the nucleic acid sequences comprising a sequence encoding a virus-specific packaging signal and a sequence encoding a structural gene.

20. (Currently Amended) The particle of claim 19, wherein the virus protein is ~~derived~~ from a virus selected from the group consisting of adenovirus, adeno-associated virus, vaccinia virus, baculovirus and hepadnavirus.

21. (Previously Presented) The particle of claim 20, wherein the hepadnavirus is a hepatitis B virus.

22. (Previously Presented) The particle of claim 19, wherein the virus protein is a surface protein.

23. (Previously Presented) The particle of claim 22, wherein the surface protein is the large surface protein of HBV (LHBs).

24. (Previously Presented) The particle of claim 19, wherein the virus protein is a core protein.

25. (Previously Presented) The particle of claim 24, wherein the core protein is an HBcAg.

26. (Currently Amended) A particle comprising:

(a) a protein envelope with a fusion protein, the fusion protein comprising a virus protein, a cell permeability-mediating peptide, and a heterologous cell-specific binding site; and

(b) nucleic acid sequences present within the protein envelope, each of the nucleic acid sequences comprising a sequence encoding a virus-specific packaging signal and a sequence encoding a structural gene~~The particle of claim 19, wherein the cell permeability-mediating peptide comprises the amino acid sequence set forth in SEQ ID NO:20.~~

27. (Previously Presented) The particle of claim 19, wherein the heterologous cell-specific binding site is RGD.

28. (Previously Presented) The particle of claim 19, wherein the fusion protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

29. (Previously Presented) The particle of claim 19, wherein the fusion protein comprises the amino acid sequence set forth in SEQ ID NO:1.

30. (Currently Amended) A particle comprising:

(a) a protein envelope with a fusion protein, the fusion protein comprising a virus protein, a cell permeability-mediating peptide, and a heterologous cell-specific binding site; and

(b) nucleic acid sequences present within the protein envelope, each of the nucleic acid sequences comprising a sequence encoding a virus-specific packaging signal and a sequence encoding a structural gene~~The particle of claim 19, wherein the fusion protein consists of the amino acid sequence set forth in SEQ ID NO:1.~~

31. (Previously Presented) The particle of claim 19, wherein the fusion protein comprises the amino acid sequence set forth in SEQ ID NO:2.

32. (Currently Amended) **A particle comprising:**

(a) a protein envelope with a fusion protein, the fusion protein comprising a virus protein, a cell permeability-mediating peptide, and a heterologous cell-specific binding site; and

(b) nucleic acid sequences present within the protein envelope, each of the nucleic acid sequences comprising a sequence encoding a virus-specific packaging signal and a sequence encoding a structural gene
The particle of claim 19, wherein the fusion protein consists of the amino acid sequence set forth in SEQ ID NO:2.

33. (Currently Amended) A method for the preparation of the particle according to claim 19, wherein the fusion protein contains an LHBs and a heterologous cell-specific binding site, the method comprising:

- (a) cotransfecting cells containing a hepatitis B virus genome, **wherein the cells do not express LHBs, and not expressing LHBs**, with a first expression vector and a second expression vector, the first expression vector coding for a fusion protein comprising an LHBs and a heterologous cell-specific binding site, and the second expression vector comprising a virus-specific packaging signal and a structural gene;
- (b) cultivating the cotransfected cells of step (a) to produce the particle; and
- (c) isolating and purifying the particles produced by the cotransfected cells of step (a).

34. (Withdrawn) A method for the preparation of the particle according to claim 19, the particle comprising a fusion protein, **wherein the fusion protein** comprises an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, the method comprising:

- (a) cotransfecting cells containing an HBV polymerase with a first expression vector and a second expression vector, the first expression vector coding for a fusion protein comprising an HBcAg, a cell permeability-mediating peptide and a heterologous cell-specific binding site, and the second expression vector comprising a virus-specific packaging signal and a structural gene;
- (b) cultivating the cotransfected cells of step (a) to produce the particle; and
- (c) isolating and purifying the particles produced by the cotransfected cells of step (a).

- 35. (Withdrawn) A fusion protein comprising a virus protein, a cell permeability-mediating peptide and a heterologous cell-specific binding site.
- 36. (Withdrawn) The fusion protein of claim 35, comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.
- 37. (Withdrawn) The fusion protein of claim 35, comprising the amino acid sequence set forth in SEQ ID NO:1.
- 38. (Withdrawn) The fusion protein of claim 35, comprising the amino acid sequence set forth in SEQ ID NO:2
- 39. (Withdrawn) The fusion protein of claim 36, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by one amino acid.
- 40. (Withdrawn) The fusion protein of claim 36, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by up to 10%.
- 41. (Withdrawn) The fusion protein of claim 36, wherein the amino acid sequence differs from that set forth in SEQ ID NO:1 or SEQ ID NO:2 by up to 20%.
- 42. (Withdrawn) A DNA encoding the fusion protein of claim 35.

43. (Withdrawn) A DNA encoding the fusion protein of claim 36, the DNA comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:3 and SEQ ID NO:4.
44. (Withdrawn) A DNA encoding the fusion protein of claim 36, the DNA comprising the nucleotide sequence set forth in SEQ ID NO:3.
45. (Withdrawn) A DNA encoding the fusion protein of claim 36, the DNA comprising the nucleotide sequence set forth in SEQ ID NO:4.
46. (Withdrawn) The DNA of claim 43, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by one base pair.
47. (Withdrawn) The DNA of claim 43, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by up to 10%.
48. (Withdrawn) The DNA of claim 43, wherein the nucleotide sequence differs from that set forth in SEQ ID NO:3 or SEQ ID NO:4 by up to 20%.
49. (Withdrawn) A DNA encoding the fusion protein of claim 36, wherein the DNA has the nucleotide sequence set forth in SEQ ID NO:3.
50. (Withdrawn) A DNA encoding the fusion protein of claim 36, wherein the DNA has the nucleotide sequence set forth in SEQ ID NO:4.
51. (Withdrawn) An expression vector which encodes the DNA of claim 43, 44, 45, 46, 47, 48, 49 or 50.